

RAILROAD IN ALABAMA, AND THE PUBLIC LANDS.

SPEECH

OF

HON. W. R. W. COBB, OF ALABAMA,

IN HOUSE OF REPRESENTATIVES, IN COMMITTEE OF THE WHOLE,

UPON THE CONTEMPLATED

RAILROAD IN ALABAMA,

AND

THE CONDITION OF THE PUBLIC LANDS: GENERALLY.

Mr. COBB said:

Mr. CHAIRMAN: In advocating these bills, which contemplate the grant of alternate sections of public lands to the State of Alabama, for the construction of railroads running through that State, I feel at liberty to say, that although it bears on its face the appearance of a donation direct to Alabama, yet many other States are intimately interested in it. It is a work to connect the Mississippi river with the Atlantic seaboard by a continuous line of railroad, as well as to connect the Tennessee river with the waters of the Mobile Bay. Sir, it is but necessary for the most skeptical observer to cast his eye over the map of Alabama, to see at one glance the importance of the work, not only to that State, but to many others. Sir, the prosperity of North Alabama, in a commercial and agricultural point of view, depends upon the completion of these roads. When completed, the eastern and western and southern waters will be accessible; and in a few hours we will be able to find a market for our produce, either in New Orleans, Mobile, Savannah, Augusta, or Charleston. But as it is now, we have to traverse the Tennessee and other rivers, a distance of about fifteen hundred miles to New Orleans, having the obstructions of the Muscle Shoals to overcome; which obstruction very often are almost insurmountable for eleven months in the year; or to Savannah, Augusta, or Charleston, a distance of about six hundred miles. A portion of the route to the three last-named points, say from fifty to one hundred and fifty miles of transportation, has to be by wagons for at least one half of the year. The road from Memphis to the Charleston and Nashville road is about two hundred and eighty miles long; the one from Selma, on the Alabama river, to Gunter's Landing, on the Tennessee river, is about two hundred and five miles. When these roads are complete we have choice of markets, in either New Orleans, Mobile, Savannah, Augusta, Charleston, Richmond, Philadelphia, New York, or Boston, or even Canada. Being a direct communication then with Alabama and either of these places, it is unnecessary to point out to this House the immense benefit that would result, not only to Alabama, but all other States which have a direct connection with her commerce and prosperity, when the bare statement of facts

is sufficient to satisfy every thinking mind of the importance of the measures.

Mr. Speaker, how gentlemen on this floor can continue to oppose such laudable undertakings in the various States with so much energy, I am at a loss to understand, when their own State or States have been the recipients of so many similar favors from the General Government, in donations of public land for various objects of public improvement within those States. The amount donated up to this time to each State, I shall endeavor to show. It is strange, I repeat, when they have had so much lavished upon them, they are not willing to grant a small portion of the poor mountain and swamp lands to aid in this work. It is not Alabama alone which is benefited; but the best interest of the Government is promoted by advancing in value and bringing into market millions of acres of land that will remain worthless and unsold for years unless a highway is opened up through them, that the products of the lands may be got to market without exacting almost one fifth of the entire value, which is frequently the case in some parts through which these roads pass. Sir, for the members of the old States to be opposed to liberal measures to their younger sisters, when propositions are first presented, is not at all surprising, when they have so little idea of the toil and labor it has cost the hardy sons of the Southwest, who have borne the burden and heat of the day in opening up highways, building churches, mills, &c., in their country, thereby making the public domain accessible for those of less courage and still less disposition to encounter the toils of a new country, thus increasing the value of the public lands. But whilst I wish to be charitable towards those of the old States in supposing at first they have some excuse for being opposed to this system of granting the public lands for such laudable objects, it irresistibly occurs to me, that in the organization of this Confederacy they reserved to themselves all the domain within their respective borders, of which I will for a moment speak.

By act of Congress, approved April 18, 1806, the United States ceded to the State of Tennessee all the claim which she had to the land within that State lying east and north of the congressional

reservation line; and by a subsequent act, the residue of the public lands within the limits of said State, (the precise amount I am not now able to state, but a very large amount.) The remainder of the old States have received all the lands within their territorial limits, except Kentucky. Out of the land within her present bounds, Virginia paid many of her soldiers for revolutionary and other services.

To show the amount of lands retained by each of the States that are not classed as land States, to pay their revolutionary and other debts, would not be amiss, which is as follows:

States.	Square miles.	Acres.
New Hampshire.....	8,030	5,139,200
Massachusetts.....	7,250	4,640,000
Rhode Island.....	1,200	768,000
Connecticut.....	4,750	3,040,000
New York	46,000	29,440,000
New Jersey.....	6,851	4,388,640
Pennsylvania.....	47,000	30,080,000
Delaware	2,120	1,356,800
Maryland	11,000	7,040,000
Virginia.....	61,352	39,265,280
North Carolina.....	45,500	29,120,000
South Carolina.....	28,000	17,920,000
Georgia.....	58,000	37,120,000
Vermont	8,000	5,120,000
Kentucky.....	37,680	24,115,200
Tennessee.....	44,000	28,160,000
Texas	325,520	208,332,800

It is true, in many of the old States but little land was public, being owned by Indians, or individuals under grants procured from the mother country. While I am at this point of my remarks, I will endeavor to answer the objections of some who simply object to granting of the new States, land through which these improvements run, unless they could obtain grants for similar improvements in their own States quite remote from any public land. In replying to this position, it is but only to repeat, that it is an established fact, that those improvements running through the public lands, enhance their value. Many of them are unsaleable, but when roads are built through them, they are brought into market immediately at their increased value. This being the case, it is not really a donation from the Government, for a large amount of individual capital must be also expended before the works can be completed, which makes sales of these poor lands. Not so in the case of grants to the old States where the improvements do not run through, and in most instances are not within hundreds of miles of, the public lands, and by no means could make them more valuable. The latter would be nothing but a clear grant, without even the semblance of an equivalent to the General Government. I will now return to the consideration of the measures immediately before us, and give a brief statement of the progress, distances, and amount of lands the two roads will receive, should the bills pass; presenting, in every instance, facts as near as possible, mostly predicated upon my personal knowledge of the entire country through which the roads run.

First: The Selma and Gunter's Landing Road is graded about twenty-six miles; by this time fifty more, it is likely, are under contract, and perhaps seventy. The agent for that road passed through here a few days since, on his way to purchase the machinery, &c., and said an agent would leave in a few days to purchase iron for one hundred miles of the road, having a large amount of stock taken and considerable paid in. The country through

which it passes, the most of which has been settled from twenty to forty years, the lands are considered not worth \$1 25 per acre; that of much value having been taken up. From Selma to Talladega, a distance of one hundred and five miles, the land now public is poor flats or pine, and gravelly ridges. The amount of public land that would be received from Selma to Talladega, I estimate, from a careful examination of the map of Alabama showing the vacant land, is about 302,400 acres. From Talladega to Jacksonville, a distance of thirty-seven miles, it passes through a densely populated country, settled thickly upon the small streams: the public lands are upon high gravelly ridges, about 123,200 acres. From Jacksonville to Gadsden, twenty miles, passing through poor, ridgy and flat pine lands, 44,800 acres. From Gadsden to Guntersville, on the Tennessee river, a distance of forty-three miles, passing over what is termed the Sand Mountain, a poor, sandy country; but few settlements, too poor and remote from market to be settled, about 156,800 acres. This road strikes the Tennessee river about sixty miles above the head of the Muscle Shoals, in said river; which Shoals will be an eternal barrier to the free navigation of that river, unless improved to a great extent, which private enterprise cannot overcome for many years to come.

The Memphis and Charleston road passes through Tennessee and that part of Mississippi in which the Chickasaw lands lay, into Alabama. Of course no public lands can be received until striking the western line of Alabama. From the Chickasaw line, about ten miles, to Tuscumbia, the road will receive about 33,600 acres. It is proper to state here, the road enters one of the finest countries in Alabama, having been settled from thirty to fifty years. Of course but little lands of much value can be received, being mountain and low swamp land, not considered worth Government price. From Tuscumbia to Decatur, forty-three miles, a railroad is now in active operation, which may form a part of the line. From Decatur to Huntsville, thirty-one miles, the amount of lands received will be about 22,400 acres. From Huntsville to its terminus, if it passes by Belleford, Alabama, a distance of sixty-two miles, the amount will be about 78,400 acres. If to Winchester, Tennessee, scarcely any.

I desire to be candid with the House, and give a fair statement of the probable amount we would possibly receive. Deduct from this amount of swamp lands now owned by the State, the amount will be much less than I have stated it. The amount that we will receive for these lands is but a drop in the ocean compared with what will have to be, and is now, raised by private subscription. The precise amount subscribed I am not now able to state, but it is said over two millions have been to this road alone.

In a national point of view, no roads could, in time of war, be of more value to the Government than those, enabling the transportation of troops and munitions of war from Tennessee, Alabama, Virginia, Georgia, South Carolina, Kentucky, Mississippi, immediately to the mouth of the Mississippi river, or to the Atlantic seaboard, in the shortest possible time. Tie the valley of the Mississippi by these lines of road, in connection with others now completed, with the Mobile Bay and the Atlantic seaboard, and who could calculate

the value, in many particulars? Congress, no doubt, had in view the national importance of connecting the Tennessee and Mobile waters, when she required that Alabama should appropriate a portion of the two and three per cent. fund to the construction of some kind of a road from the Tennessee river to the waters of the Mobile Bay, which fund is now ready, and will be faithfully applied to the construction of the railroad now progressing, amounting to a considerable sum. To carry out this object of the Government, we ask a grant of land. To speak of the rich coal mines, marble and iron ore in the country through which the road will pass, which is now comparatively worthless, being so remote from navigable waters, would tax the patience of the House. It is enough to say, so soon as the road is completed, all will be opened up to an enterprising community, from which they may expect to reap a rich reward. I do hope soon to see the iron horse on his way from the Mississippi river to Maine—yes, and from the Mobile Bay to the Lakes.

I will endeavor to show, before I conclude, how the public lands have been disposed of since the organization of the Government, down to a very late period, by facts and figures, taken from the most authentic sources to which access can be had; and it is to be hoped, after this exposé is made, no more opposition will be made to these measures, particularly by those persons whose States have shared so bountifully from the hand of a liberal Government. Our object is, in part, to open up an easy communication, that the citizens of the North, South, East, and West, may daily mingle with each other, becoming better and better acquainted, seeking to live in peace—giving to each other his just right, is but to promote the common good of the whole, thereby stop sectional strife and discord. My word for it, the more we learn of each other, just in that proportion we will overcome our prejudices, and it is to be hoped but one feeling of universal good-will may prevail, “doing to others as we would have them do unto us.” Then will be the beginning of that glorious earthly millennium, so much by us desired, and we will go on to fill up the measure of greatness and glory which I believe await us, and will not be a hiss and a by-word, but pointed to by all nations as one great and happy people. Then it will be, that strife and discord will have ceased to find a place to lay its hideous head; and we will hear no more of disunion from the North or the South, but, like one common brotherhood, claim not the North or the South, the East or the West, as our country, but the Union, the whole Union.

I have already shown how the lands in the old States were disposed of, retaining all for their own purposes, besides selling to the Government a large extent of territory, out of which several of the new States have been carved. I will also show the amount of public land sold, at what price, in what State, and amount received into the Treasury from sale of lands, the amount yet public and where it is situated. But before I proceed to do so, as it has been the constant theme of some who have been opposed not only to grants for railroad objects, but to the soldiers who have fought and achieved much of this rich inheritance, that these grants will bankrupt the Treasury, to refute this idea it is but necessary to call your attention to the following tables:

Exhibit of Donations and Grants to different States for various purposes, including sixteenth-section grants; calculated up to 1st January, 1849.

States.	Common Schools.	Universities, &c.	States Government.	Salines.	Per act of Sept. 4, 1841.	Roads.	Canals.	Aggregate.	No. square miles in States.	No. acres.	Am't received for land sold to Jan. 1, 1849.	Acres sold.	Average per acre.	Yet public.	Acres.
Ohio	704,488	23,040	2,560	24,216	—	80,773	1,100,361	1,332,878	39,964	25,576,560	\$20,670,249	30	12,480,215.19	\$1 66*	807,556.15
Indiana	650,317	23,040	2,560	23,040	—	170,582	1,439,279	2,308,818	33,809	21,637,760	21,316,099	87	15,477,628.51	1 38*	3,271,730.56
Illinois	978,755	23,040	2,560	121,629	209,085	—	—	1,625,948	55,405	35,456,200	19,554,409	33	15,644,145.11	1 30	14,998,937.55
Missouri	1,199,139	23,040	2,560	46,008	500,000	—	—	1,777,819	67,380	43,123,200	12,721,141	64	9,729,360.86	1 31	29,436,942.34
Alabama	902,774	23,040	1,620	23,000	—	—	500,000	1,450,474	50,722	32,462,680	16,888,647	38	10,852,933.47	1 56	17,450,560.63
Mississippi	837,584	23,040	1,280	—	500,000	—	—	1,361,904	47,178	30,174,080	16,402,691	62	13,462,921.67	1 36	14,326,431.95
Michigan	1,067,397	48,080	3,200	46,080	500,000	—	—	1,662,757	46,430	29,715,840	4,086,394	26	3,224,025.80	1 27	23,462,018.36
Louisiana	786,040	46,080	—	—	500,000	—	—	1,332,124	56,245	35,995,520	11,399,579	16	9,071,223.28	1 26	25,057,704.32
Arkansas	886,460	46,080	3,200	46,680	500,000	—	—	1,481,820	52,190	33,406,720	3,769,694	90	2,995,237.15	1 26	27,464,613.49
Wisconsin	958,648	46,080	6,400	46,080	360,364	—	358,400	1,775,920	53,924	34,511,360	5,792,234	88	4,567,094.76	1 27	27,431,029.76
Iowa	905,144	46,080	5,121	46,080	500,000	—	325,078	1,825,582	50,914	32,584,960	2,954,652	29	2,361,022.24	1 25	28,368,436.89
Florida	908,503	46,080	5,120	—	499,990	—	—	1,459,693	59,268	37,931,520	1,217,542	69	942,248.12	1 29	33,837,392.79
Total	10,785,253	414,720	31,700	492,325	4,169,438	251,355	3,914,033	19,988,825	613,405	392,575,200	\$136,772,677	32	100,209,655.64	\$1 35	245,913,343.72

* Exclusive the sales of the Chickasaw cession.

States.	By act Sept. 28, 1850, granted as swamp lands.	By act 20th Sept., 1850. [†]
Ohio	363,329	
Indiana	981,626	
Illinois	1,833,412	1,152,000
Missouri	1,517,288	
Alabama	436,450	216,560
Mississippi	2,239,987	864,000
Michigan	2,266,675	
Louisiana	4,544,189	
Arkansas	4,807,673	
Wisconsin	1,259,269	
Iowa	33,813	
Florida	562,176	
Total	20,785,336	2,232,560 [†]
On the 1st day of January, 1849, public lands surveyed and unsurveyed, within the States.....	Acres.	245,913,346
Deduct amount of acres sold from the 1st January, 1849, to 30th September, 1850, as shown by Commissioner Butterfield's report.....	2,199,584	
Located by Mexican bounty land warrants, 7,213,600		
Swamp land, by act of Congress, 28th September, 1850.....	20,785,366	
Granted to the Mobile and Chicago Railroad, by act of Congress, the 20th September, 1850, supposing they get all by law allowed, being public, on the line of road, which is not at all probable.....	2,232,560	
Bounty land to officers and soldiers of the various wars since 1790, by act 28th September, 1850, and the amount necessary to pay outstanding Mexican warrants.....	16,000,000	48,431,110
Leaving a balance of public lands within the States, California not included.....		
Add to this amount the Territories of Nebraska, Minnesota, east of the Rocky Mountains.....	197,482,250	
West of the Rocky Mountains, embracing Utah and Oregon.....	477,173,760	
California and New Mexico.....	218,536,220	
Amount purchased from Texas, by what is termed the Compromise, or Pearce's bill, south of 36° 30',.....	28,583,680	336,689,920
North of 36° 30', or Mis-		

[†] To the Mobile and Chicago Railroad.

[†] Provided the line of road get their full amount, which is by no means likely—much of the land being taken up.

souri compromiseline, 27,863,680 55,857,360

1,285,735,516

Indian Territories, (within the United States,)..... 159,754,640

It must be borne in mind, there are many private claims in the late purchase from Mexico, as well as grants to actual settlers, and private claims in Oregon, which must be deducted.

It is frequently stated that the Government has not as yet received as much money for the public land as it has cost. It may not be improper to state, from the various reports of Commissioners of Public Lands, (Messrs. Young and Butterfield,) I find that statement to be incorrect, which may be seen from the following calculation:

Amount of lands sold within the States up to first of January, 1849, are 100,209,556 acres, at an average of \$1 35 per acre..... \$136,772,677

Since first of January, 1849, up to 30th September, 1850, 2,199,584 acres, at an average of \$1 31 $\frac{1}{4}$ per acre..... 2,886,676

Total amount sold 102,409,140 acres, and total amount received..... \$139,659,353

Amount paid for lands as shown by report of Commissioner Butterfield, for 1850; including the amounts paid France for Louisiana, to Spain for the Floridas, and for extinguishing Indian titles..... \$61,121,717

Expenses for surveying, &c..... 6,369,839

For selling, &c..... 7,466,324

Add to this amount—paid Texas for purchase, 1850, by Pearce's bill. 10,000,000

Amount paid Mexico, (supposed,) including claims assumed..... 18,000,000—102,957,880

Excess over and above the cost of land. \$36,691,473

Having shown (as near as can be) that the Government has thus far been reimbursed for all she has paid out, and has an excess of over \$36,000,000 for actual cost of lands, besides having given away for various purposes to her citizens, in way of bounties, for internal improvements, and school purposes, (not including grants to the soldiers previous to 1836,) over sixty-five millions—say 65,219,311 acres—still having at her disposal 1,285,739,516 acres.

Trusting she will still be liberal with this valuable inheritance, in donating to legitimate objects, such as railroads to Alabama and other States where they run through public land, as well as to every poor man a home, that generations rising up may say: My country above all others; for it is truly the land of the brave and a home for the poor.

I will, in conclusion, append to my remarks a few extracts from reports of Lewis Troost, Esq., and Charles F. M. Garnett, Esq., chief engineers, which contains valuable information, such as will be read with great pleasure by many of the citizens of the United States, and particularly Alabama,

whose interests are so intimately woven with this work.

APPENDIX.

The Alabama and Tennessee River Railroad is emphatically a *State* and a *National enterprise*.

The State of Alabama embraces within its limits an area of about 50,275 square miles. The Tennessee river runs through the northern part of the State, from its northeast to its northwest corner. South of the Tennessee river a mountain range, being the southern extremity of the great Appalachian chain, extends nearly parallel with the river, from the east to the west boundary of the State. The waters, rising in the southern slope of this mountain range, drain the middle and southern sections of the State, and form the Coosa, Tallapoosa, Cahawba, Warrior, Tombeckbee, and Alabama rivers. By this disposition of the mountains and rivers, three grand natural divisions of the State are constituted, viz:

1st. The northern division, having an area of 7,255 square miles, north of the mountain range, deprived of a natural communication with the middle and southern divisions, and having access to a market, for a part of the year only, by a tedious and dangerous navigation of from 1,400 to 1,800 miles by the Tennessee, Ohio, and Mississippi rivers.

2d. The middle division, having an area of 22,000 square miles south of the mountain range, extending to the parallel of $32^{\circ} 30'$ north latitude, at the head of the navigable waters of the Bay of Mobile, and dependent on flat-boats and upon wagons over badly graded earth roads as the means of transportation for its productions.

3d. The southern division, having an area of 21,020 square miles, extending to the southern boundary of the State and to the Gulf of Mexico, and drained by a system of rivers unsurpassed in navigable utility.

We thus perceive that of the State of Alabama, a seventh part is commercially, and therefore socially and politically, a distinct member of the State, compelled by natural barriers to trade and identify itself in interest with other States and communities, and that over one third part of the State has only a temporary, uncertain, and expensive outlet for its productions and communication with its seaport.

An enterprise, therefore, which, like this railroad, commences at the northern limit of that division of the State open to a free and uninterrupted navigation to the Gulf of Mexico, which passes through and connects those divisions of the State deprived of an outlet for their productions, which unites all of them by bonds of interest, which affords the safest, most certain, and capable means of transit and transport, and which will develop rich and incalculable mineral resources, must be emphatically a great State work.

It is a national enterprise. Take a map of the United States, trace the connections which it will make by its proposed branch with the railroads now completed and in contemplation, and with rivers, and you will observe that it connects the Gulf of Mexico with the South Atlantic, Middle, Western, and North Atlantic States.

DESCRIPTION OF THE COUNTRY.

GEOLOGICAL CHARACTER.—From Selma to about

eight miles of Montevallo the route runs over sand and loose gravel deposits; thence it passes into the carboniferous and the silurian orders of rocks, through which important formations it continues to its terminus at Gunter's Landing, running, however, on the east side of the Coosa river, in eight or ten miles of the western edge of the metamorphic rocks.

These geological formations are the most important of all in their economic and useful productions. In the rocks classed by geologists as carboniferous, coal and iron in close proximity to each other, limestone, sandstone, and lead are found. The silurian rocks contain iron ore, limestone, sandstone, and lead; and the metamorphic rocks comprise granite, syenite, white marble, roofing slate, and the following metallic deposits: magnetic iron ore, copper, lead, silver, tin, gold, and mercury.

It is to the possession of a large area of the carboniferous formation that England owes her power and wealth; from this formation she annually derives 34,754,000 tons of coal, valued at \$95,000,000; and 1,000,000 tons of bar iron, equal in value to \$45,000,000. I cite these facts to show the importance to be attached to the location of the railroad, through and near the valuable geological formations before mentioned.

The carboniferous and silurian beds in Alabama are exceedingly rich in their useful rocks and metals.

There are four extensive coal fields in Alabama in striking distance of the railroad. They may be designated as follows: The "Tuscaloosa coal field," which is the greatest in area, lies in the valleys of the Warrior and its tributaries. The "Cahawba coal field," the southern boundary of which is at Centerville and Montevallo, occupies the valley of the Cahawba and its tributaries. The "Coosa coal field" is on the west side of the Coosa river in the vicinity of Broken Arrow Creek; and the fourth coal field is in De Kalb and Marshall counties, between the Tennessee and the Coosa rivers. The coal strata on the Warrior and its tributaries, ten of which have been discovered, are from ten to forty-eight inches thick, and are slightly inclined towards the valley of the river; those on the Cahawba, are from two to eight feet thick and are highly inclined, while those on Broken Arrow Creek, and in De Kalb and Marshall counties, are said to be from four to ten feet thick.

The coal, all of which is bituminous, of the three first mentioned fields, has proved to be of an excellent quality, having been tested in steam ships, gas works, foundries, factories, &c., and from the examinations which have been made there can be no doubt of its abundance.

Each and all of these coal fields are convenient and accessible to the Railroad, particularly those on the Cahawba river, and Broken Arrow Creek, and in De Kalb and Marshall counties. The coal measures of the Cahawba will be in from sixty to seventy-five miles; of the Broken Arrow of from one hundred and twenty to one hundred and thirty miles; and of De Kalb and Marshall counties of from one hundred and seventy to one hundred and ninety-five miles of Selma by the railroad, with branch lines of from five to fifteen miles long. The Warrior beds may be reached by a branch of thirty to forty miles long, making their total distance to Selma from eighty to ninety miles.

In close proximity to the coal treasures are ex-

tensive and inexhaustible beds of iron ore of the finest quality. In fact the counties of Bibb, Shelby, Talladega, Benton, Cherokee, St. Clair, Jefferson, and Tuscaloosa, abound in deposits of iron ore, not excelled in richness and extent. The ore has been tested and yields an excellent quality of iron. Notwithstanding the difficulties experienced for the want of suitable means of transportation to market (the cost of transportation to a navigable river being from \$9 to \$12 per ton) the ore is manufactured into iron in several localities with profit.

Messrs. McClannahan & Ware turn out from 8,000 to 10,000 pounds daily, at their works in Shelby county. They are making preparations to engage extensively in the manufacture of different kinds of iron, and they must succeed, on account of their good ore, cheap fuel, labor and provisions.

In Benton and Talladega counties there are several forges and furnaces in operation. The Messrs. Riddle manufacture iron on Talladega Creek, Talladega county. Messrs. Moore and Goode have iron works on Cane creek in Benton county. Their works now consist of one furnace and one forge, which turn out twenty tons of castings and pig iron per week, and sixteen hundred pounds of wrought iron daily. They are building another furnace and a rolling mill, calculated to yield, with their present works, about ten tons of rolled iron per day, and in addition, one ton of castings to supply the home demand. Their works are situated at the foot of a deposit of iron ore, which for its extent would astonish the iron masters of Pennsylvania.

Indeed, throughout the whole section of country near and adjacent to the line of the road, from a point a few miles south of Montevallo, to the northern crossing of the Coosa river, there exist numerous iron ore deposits, which only require an opening to a market to become extremely valuable.

Another highly important material, which abounds in localities convenient to the Railroad, throughout the carboniferous and silurian rocks, is the limestone. Some of the limestone of these beds furnishes marble of excellent quality, and of beautifully variegated colors. Several varieties of blue and grey marble occur in Shelby county; in Talladega county a jet black marble; in Cherokee a buff colored marble; and in Benton county a dove-colored marble, have been found. These varieties of marble take a very fine polish, dress well, and will become very useful for building and ornamental purposes. A large portion of this limestone when burned, yields quick-lime, equal in strength and whiteness to the Thomaston lime. This is a consideration of great consequence, when we reflect that most of the lime used in South Alabama and Mississippi and Louisiana is now imported from the New England States at an expense of from \$1 to \$1.50 per barrel to the consumer. The lime exported from one town in the State of Maine, Thomaston, amounts to four hundred thousand barrels per annum.

There must be always a constantly-increasing demand for this useful building material, in the southern part of Alabama, Mississippi and Louisiana, from the fact that they contain no limestone suitable to make quick-lime. On the route of your road it exists in great abundance in the valleys, and from its superior quality, and the cheapness of fuel, (coal and wood,) it must be-

come a source of great traffic to the road, and of wealth to the country.

Large beds of gypsum have likewise been found.

This article, so useful in agriculture, will also swell the freight. There are other productions of these formations deserving notice, such as hydraulic limestone, mill stones, whet stones, flag stones, lead and manganese.

In the metamorphic rocks in Talladega and Coosa counties, we find a beautiful and highly-valuable white marble, and granite well adapted for building. The marble quarries of Dr. Gantt, situated in the southern part of Talladega county, convenient to the projected route of this road, are particularly worthy of being mentioned on account of the pure white saccharine marble which they yield in masses of great size.

These quarries are worked under all the disadvantages and difficulties attendant on the transportation to market. The Gulf States are now principally supplied with this material from New England. In New Orleans alone, the demand amounts to upwards of \$250,000 per annum, at the rate of \$30 per ton. Such is its high price that its use is of course principally confined to monumental purposes; but if facilities could be obtained to transport it to the navigable waters of Alabama, it could be afforded at a price which would induce its general use for building.

I have thus been particular in noticing the mineral resources of the country traversed by the Alabama and Tennessee River Railroad, because a knowledge of their existence has heretofore been confined to a few.

The valley of the Tennessee is one of the most desirable agricultural sections of Alabama. Being one of the earliest settled districts of the State, it is now the centre of wealth, hospitality and refinement, and the abode of a fixed, permanent population. The lands are rich, and by the present mode of culture, inexhaustible. Almost the whole extent of tillable land is placed in requisition and covered with thriving, well-cultivated farms, and fat stock.

Until within the last year the course of trade of the Tennessee valley was down stream by the Tennessee, Ohio, and Mississippi rivers, to New Orleans; but since the opening of the Georgia railroads to the Tennessee river, a considerable proportion, particularly of the cotton, has changed its direction up stream to Chattanooga, from whence it is transported by railroads to the South Atlantic ports.

Gunter's Landing, the terminus of the Alabama and Tennessee River Railroad, being the most southern point of the Tennessee river, and being central to all that part of North Alabama, north of the river above the Muscle Shoals, is the most advantageous point of shipment to the Gulf. It is sixty-two miles above the head of the Muscle Shoals, fifty miles above Decatur, the terminus of the Decatur and Tuscumbia Railroad, thirty miles above Whitesburg, which is ten miles south of Huntsville, and about thirty-two miles from Huntsville by a practicable railroad route.

There are now produced in North Alabama, above the Muscle Shoals, about 60,000 bales of cotton.

The following table exhibits the population, and the aggregate value and produce of agriculture in the counties of Alabama adjacent to and directly

interested in the Alabama and Tennessee River Railroad, based upon the census of 1840, and upon the increases estimated in the reports of the Commissioner of Patents for 1847 and 1848:

Population..... 223,206
STOCK.

Horses and mules..... 77,025
Neat cattle..... 307,959
Sheep..... 92,916
Swine..... 799,786
Value of poultry..... \$215,491

AGRICULTURAL PRODUCTIONS.

Bushels of wheat per annum..... 818,000
Bushels of oats per annum..... 970,000
Bushels of corn per annum..... 14,410,000
Bushels of potatoes per annum..... 565,000
Pounds of tobacco..... 220,000
Pounds of cotton per annum..... 66,464,860
Value of home-made family goods..... \$1,215,179

The extent of country which will be opened to the trade of the Gulf of Mexico by the railroad and its connections, embraces twenty-seven counties in Tennessee, viz: Giles, Lincoln, Franklin, Marion, Hamilton, Bradley, Polk, McMinn, Meigs, Rhea, Monroe, Roane, Blount, Sevier, Knox, Anderson, Cocke, Jefferson, Grainger, Claiborne, Greene, Powell, Hawkins, Washington, Sullivan, Carter and Johnson; six counties in Northwest Georgia, viz: Floyd, Chattanooga, Walker, Murray, Gilmer and Cass; six counties in western North Carolina, viz: Cherokee, Macon, Haywood, Buncombe, Yancey, and Ash; and six counties in southwest Virginia, viz: Lee, Scott, Washington, Grayson, Wythe, and Tazewell. These counties have a population as follows, viz:

In the counties of Tennessee.....	319,000
" " Georgia.....	38,000
" " North Carolina....	31,000
" " Virginia.....	55,000

Making a population of..... 443,000 which can be supplied with groceries, southern and tropical productions, and can exchange their produce in less distance and time by the route of the Alabama and Tennessee River Railroad than by any other.

As a line of travel, the Memphis and Charleston railroad possesses an importance which can scarcely be too highly estimated. Without concert of design, in fact without even the knowledge, on the part of the different projectors, of what each other was doing, there has been a system of railroads laid out, which when completed, may be called emphatically, the highway of nations. Much of this system is already completed, and every link in the great chain is now under regular organization and in rapid progress. Four years will not elapse before the greater part, if not the whole, will be in full operation. There are now, finished and in process of construction, railroads, forming one unbroken line, from Memphis to Boston—and this line may be called *practically* straight. It is in fact the shortest line on which a road could be constructed between those points, the natural features of the country not admitting a shorter one. It is truly wonderful that the merits of this route should have been so long unknown to the public, for nature herself seems to have marked it out. Here is a line nearly straight, passing through the

centre of the Union, on which the mountains have been levelled, as if by design. Though this line crosses all the mountain ranges, it encounters no grade, exceeding sixty-eight feet per mile, and it is only on the Virginia and Tennessee railroad that this rate of ascent is used. The line generally follows natural valleys, where the grades are gentle and the work light. From Memphis to Lynchburg, a distance of seven hundred and fifty miles, the whole cost of constructing a road, of the most substantial character, and fully equipping it, will not reach \$15,000 per mile, although five hundred miles of that distance traverse a mountainous region. If this great line had its termini in Memphis and Boston, it might well be called a national work. But this is not all. There are two schemes recently put on foot, at the extreme points of this line, which must add greatly to its importance. One is the plan of a canal across the Isthmus of Tehuantepec, which is now exciting much interest in New Orleans; the other is the "European and North American Railway," which may date its birth from a convention held in Portland, Maine, on the 31st of July last.

The immediate effect of the first of these schemes will be to make our road the channel of communication between our eastern cities (including the seat of Government) and our possessions on the Pacific. And not only this, but our intercourse with China must be by the same route.

Careful surveys and examinations have fully established the feasibility of this scheme. The Isthmus of Tehuantepec possesses a rich soil, salubrious climate, and great variety of natural productions. The bar at the mouth of the Coatzacoalcos is as good as the one at the mouth of the Mississippi. The river itself is navigable for thirty-four miles for large vessels, and can easily be improved higher up. This river flows through a dense forest of oak, cedar, pine, iron-wood, Brazil-wood, mahogany, and live-oak.

On the Pacific side are two lakes, affording a commodious harbor; the interior is connected with the exterior by a communication called the canal of Santa Teresa, and the entrance from the ocean to the exterior lake is called the Bocca Barra. It is one hundred and fifty miles from the Pacific to the Atlantic; being about fifteen miles from the Bocca Barra to the ship landing.

From New Orleans to San Francisco, by the Isthmus of Tehuantepec, is eighteen hundred and twenty-five miles less than by the Isthmus of Panama, and the saving of distance between New York and San Francisco would be fourteen hundred miles, which will determine all these cities in favor of the Tehuantepec route. The distance from San Francisco to Bocca Barra is twenty-eight hundred miles; from Bocca Barra to Coatzacoalcos, across the isthmus, is one hundred and fifty miles; from the latter place to New Orleans is nine hundred miles. A traveler starting from New York, and passing over the Memphis and Charleston railroad, and by this route, instead of the Panama route, will save sixteen hundred miles of sea voyage on the Atlantic side, and thirteen hundred miles on the Pacific side. In time of war, with a fleet to protect the Gulf, the intercourse of the Atlantic States with California and China might go on with perfect safety through this interior route. These considerations should give New Orleans a deep interest in our road, as that city must become

the great entrepôt of the trade and travel between the old States and California and China.

The journey from Memphis to San Francisco, by the proposed route, allowing two days and a half for the river boats, between Memphis and New Orleans, allowing for the ocean steamers on the Gulf and on the Pacific fifteen and a half miles per hour, which is the speed of the Cunard steamers, and allowing one day to cross the isthmus, would require thirteen days and ten hours, as may be seen by the following calculation:

	Miles.	Days.	Hours.
From Memphis to New Orleans.....	800	2	12
" New Orleans to Coatzacoalecos..	900	2	10
" Coatzacoalecos to Bocca Barra...	150	1	
" Bocca Barra to San Franciseo..	2,800	7	12
		—	—
		13	10

The other scheme, which is to have such an important bearing on the prosperity of this road, is the "European and North American Railroad." There is a line of railroads now in operation from New York, through Boston, to Waterville, in Maine, a distance of four hundred and ten miles. This new company propose to extend this line through New Brunswick and Nova Scotia to Halifax, passing through the towns of Bangor, Calais, and Truro.

This road will be four hundred and eighty-five miles, and it will probably be extended hereafter to Cape Canso.

From Halifax it is proposed to run steamers to Galway Bay, on the western coast of Ireland, which will be crossed by the "Great Midland Railway" to Dublin. From Dublin the line of travel will be continued, by steamers, across the channel to Holyhead, thence crossing the Menai Straits by the Britannia Bridge, and to London by the Chester and Holyhead and the London and Northwestern Railways. By this plan the ocean navigation will be reduced to two thousand one hundred and sixty-five miles, and will require only five and a half days.

The whole time required for a journey from New York to London, will be seven and a half days, as will appear from the following detailed statement:

	Days.	Hours.	Minutes.
From London to Holyhead, 263 miles, at 35 miles per hour, average speed of express trains including stoppages.....	0	7	30
From Holyhead to Dublin, 63 miles, 18 miles per hour, the present speed of the Channel boats.....	0	3	30
From Dublin to Galway, 120 miles, at 30 miles per hour....	0	4	00
From Galway to Halifax, 2,165 miles, at 16½ miles per hour, the Cunard boats having attained 15½, and, with less weight of coals, will increase their speed.....	5	11	15
From Halifax to boundary between New Brunswick and Nova Scotia, 120 miles, at 30 miles per hour.....	0	4	00
Through New Brunswick via St. John to Calais in Maine, 210 miles, at 30 miles per hour....	0	7	00
From Calais to Waterville, 155 miles, at 30 miles per hour.....	0	5	10

From Waterville to New York (line in actual operation) 410 miles at 30 miles per hour....	0	13	40
Total running time.....	7	8	5
Add 4 hours for delays, trans-shipments, &c.....	—	4	—
Whole time between London and New York.....	7	12	5

From Memphis to New York by the Memphis and Charleston road is one thousand two hundred miles, and is the nearest practicable line. This distance, at twenty-five miles per hour, will require two days—let twelve hours be allowed for delays and changes, and call it two days and a half. This will make the journey from Memphis to London ten days, and from London, by way of Memphis, to San Francisco, twenty-three days and ten hours.

Nor does this complete the chain; for steamships may perform the voyage to China, from San Francisco, by having supplies of coal deposited at the Fox Islands. The most northern free port in China, Shanghai, is in latitude 31°. San Francisco is in latitude 37½°, and it is probable that by no other route could steamships cross the Pacific.

Ships, in the present state of steam navigation, cannot carry a supply of coal for more than three thousand miles and pay a profit. The Fox Islands are about midway between San Francisco and Shanghai, and about the same distance from each as it is from Halifax to Liverpool, the present route of the Cunard steamers.

Lieut. Maury calculates that steamers may perform the trip between Shanghai and San Francisco in twenty-six days.

This would then be the nearest possible route from China to London, and the journey could be performed in forty-nine days and ten hours.

It is a circumstance worthy of remark, and significant in view of any future plan of a direct road to California, that Memphis is in latitude 35°, just between the two places above mentioned.

But let us examine a little more closely into the line between Memphis and New York. There is certainly no route, now traveled between these points, which is not longer by more than four hundred miles than that by way of your road. An examination of the map will satisfy any one that there are natural difficulties which will prevent a shorter line from ever being made.

Some idea may be formed of the directness of this line by the fact that, should the shortest line be adopted, the variation in latitude between the most northern and the most southern point on any part of the line, between Chattanooga and Memphis, will be less than thirty miles; and between Richmond and the furthest southern point of this line of roads, the difference of latitude will be only 2½ degrees.

There is no portion of this line which is not chartered, and there are but thirty miles between this road and New York which are not now in progress of construction. This thirty miles is between Chattanooga and Cleveland, on the East Tennessee and Georgia railroad. A charter was obtained for this road, but no company was organized under it.